FIG.

TTCACACAGGAAACAGAATTCCCGGGGATCCGTCGACCTGCAGCCAAGCTT

·HindIII

SEQ ID NO.:285

TTCACATAAGGAGGAAAAAACcatggGATCCG-

pKK223-3N

Ncol

SEQ ID NO.:286

FIG. 2A

Cloning Step 1

ď p, ď z . LJ GAG A AIT AAC GCT AAT CCG AAC GCT AAT CCG AAC GCT AAT CCG AAC GCT AAT CCG

U GGC  $\mathtt{TTA}$ ITG CGA TTA GGC TTG CGA TTA GGC TTG CGA TTA GGC TTG CGA

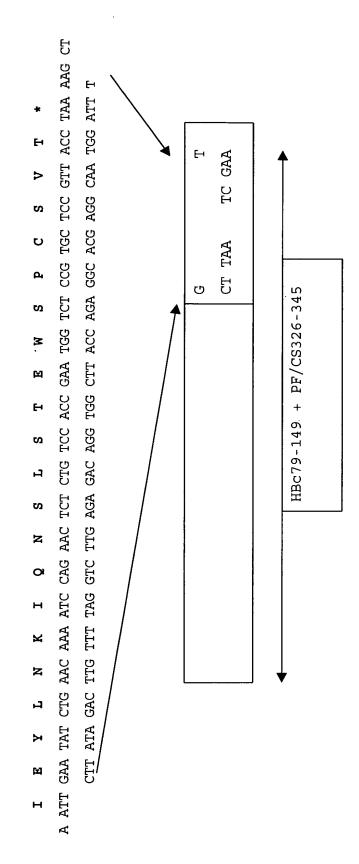
HBc 79-149 GAG Ö TAA G Ö HBC

(NANP) + HBc 1-78

pKK223-3

FIG. 21

Cloning Step 2



Sheel FIG. 2C

326-345

PF/CS

HBc79-149

GI-(NANP)4-EL

HBc 1-78

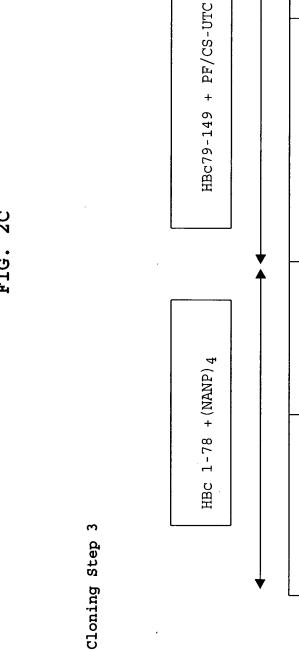


FIG. 2C



FIG. 3

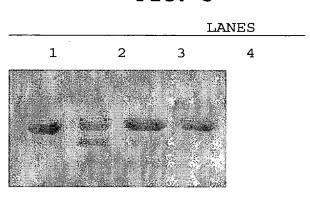
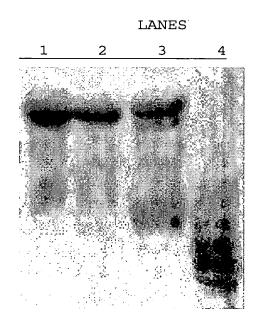


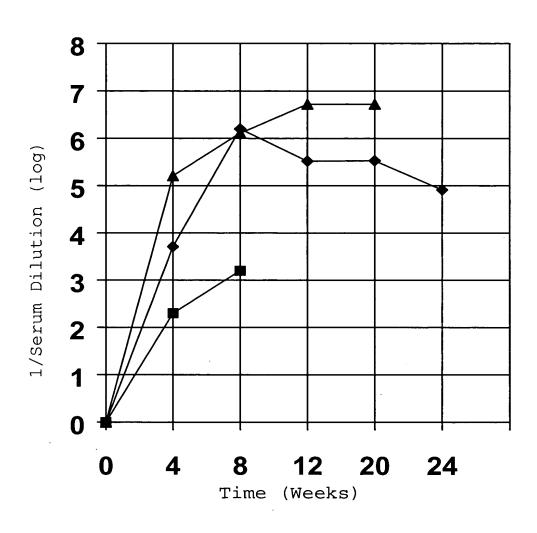
FIG. 4



Title: Immunogenic HBc Chimer Parrticles Having Enhanced Stability (Applicant: Birkett) Enhanced Stability (Applicant: Birkett)
Serial No.: New Application, Filed: 8/15/01
Attornev Docket No.: ICC-102.2 (4564/81175)

et 5 of 10 FIG. 5

FIG. 5



**FIG.** 6

## Scheme 1

I sm-HBc NH<sub>2</sub> + N-O-C CH<sub>2</sub>-N CH<sub>2</sub>

Title: Immunogenic HBc Chimer Parrticles Having Enhanced Stability (Applicant: Birkett)

et 7 of 10

Serial No.: New Application, Filed: 8/15/01 Attorney Docket No.: ICC-102.2 (4564/81175)

## FIG. 7A

mylfhlclvf acvpcptvqa sklclgwlwd Ground Squirrel

ldtasalyre vdtaaalyee ldtasalyre ldtaaalyrd vdtatalyee ldtasalyre ldffpdlnal ldffpdlnal mdidpykefg atvellsflp sdffpsvrdl sdffpsvrdl sdffpsvrdl sdffpsvrdl ssyqllnflp ssydllnflp atvellsflp atvellsflp atvellsflp mdidpykefg mdidpykefg mdidpykefg mdidpykefg mdidpykefg Ground Squirrel Woodchuck HBC ADYW HBc ADW2 HBc ADW HBC AYW

wvgtnledpa cwgelmtlat wvgvnledpa cwgelmtlat wvgnnlqdpa wvgnnledpa wmssnitseq wmsentteev cwgelmtlat cwgdlmtlat cwdeltklia cweeltrlit eltgrehcsp hhtairgalv hhtairqalv alespehcsp hhtalrqail hhtalrgail alespehcsp hhtalrqail hhtalrqail alespehcsp alespehcsp eltgrehcsp Ground Squirrel Woodchuck HBC ADYW HBc ADW2 HBc ADW HBC AYW



## FIG, 7E

81

gretvieylv	gretvleylv	gretvleylv	gretvleylv	gqhtvqeflv	qhtvqeflvs
srdlvvsyvn tnmglkfrql lwfhiscltf gretvieylv	srdlvvnyvn tnmglkirgl lwfhiscltf gretvleylv	srdlvvnyvn tnvglkirql lwfhiscltf gretvleylv	srdlvvsyvn tnvglkfrql lwfhiscltf gretvleylv	vrtiivnhvn dtwglkvrqs lwfhlscltf gqhtvqeflv	rriivdhvnn twglkvrqtl wfhlscltfg qhtvqeflvs
tnmglkfrql	tnmglkirgl	tnvglkirgl	tnvglkfrql	dtwglkvrqs	twglkvrqtl
srdlvvsyvn	srdlvvnyvn	srdlvvnyvn	srdlvvsyvn	vrtiivnhvn	rriivdhvnn
HBc AYW	HBc ADW	HBc ADW2	HBc ADYW	Woodchuck	Ground Squirrel

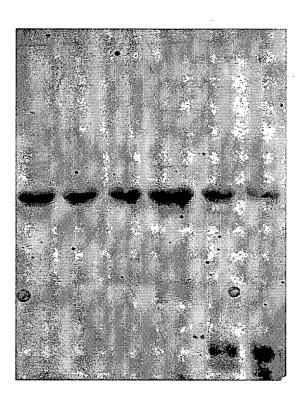
sfgvwirtpp ayrppnapil stlpettvvr rrgrsprrrt	sfgvwirtpp ayrppnapil stlpettvvr rrdrgrsprr	sfgvwirtpp ayrppnapil stlpettvvr rrdrgrsprr	sfgvwirtpp ayrppnapil stlpettvvr rrgrsprrrt	sfgvwirtpa pyrppnapil stlpehtvir rrggarasrs	fgvwirtpap yrppnapils tlpehtvirr rggsraarsp
stlpet	stlpet	stlpet	stlpet	stlpeh	tlpeht
ayrppnapil	ayrppnapil	ayrppnapil	ayrppnapil	pyrppnapil	yrppnapils
sfgvwirtpp	sfgvwirtpp	sfgvwirtpp	sfgvwirtpp	sfgvwirtpa	fgvwirtpap
HBc AYW	HBc ADW	HBC ADW2	HBc ADYW	Woodchuck	Ground Squirrel

sqc resqc resqc sqc	าวอเลาเรีย
02 11 11 02 0	3. C
prrrrsgsre gsprrrrsgs gsprrrrsgs prrrrsgsre	radabriti
psprrrsqs prrrrsqsre rtpsprrrrs qsprrrrsqs rtpsprrrps qsprrrrsqs psprrrrsqs psprrrrsqsre psprrrrsqsre prrrrsqsre	rrrtnsprrr radsprrrra dspasno
HBC AYW HBC ADW HBC ADW2 HBC ADVW WOOdchuck	Ground Sanirrel



FIG. 8

<u>V12.Pf1</u>				V12.Pf1(C17A)C150			
_			DAY	S			
	0	7	14	0	7	14	



Title: Immunogenic HBc Chimer Parrticles Having Enhanced Stability (Applicant: Birkett) Serial No.: New Application, Filed: 8/15/01 Attorney Docket No.: ICC-102.2 (4564/81175)



FIG. 9

## 1 2 3 4 5

